

Twin Lakes Reservoir No. 1, Dam Structure
At the head of Big Goose Creek
Big Horn National Forest
Sheridan vicinity
Sheridan County
Wyoming

HAER No. WY-52-A

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Rocky Mountain Regional Office
U. S. Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

HISTORIC AMERICAN ENGINEERING RECORD

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Twin Lakes Reservoir No. 1. Dam Structure

HAER No. WY-52-A

Location: At the head of Big Goose Creek, Big Horn National Forest, 25 miles southwest of Sheridan, Sheridan County, Wyoming

Quad: Dome Lake, Wyoming 7.5 (1964)

Date of Construction: 1936-1937

Present Owner: City of Sheridan, Wyoming

Present Use: Water supply for the city of Sheridan

Significance: The dam contributes to the significance of Twin Lakes Reservoir No. 1. The reservoir features hand-laid riprap on the earthen dam face and north shoreline. The dam retains excellent physical integrity.

Dam Structure

The Twin Lakes Reservoir No. 1 is an earthen dam constructed with selected graded materials on the upstream side and more pervious materials on the outlet side, with concrete cross trenches at its base. A 15-inch layer of riprap, consisting of hand-laid and fitted stones, covers the upstream side of the dam from the intake to the crest of the dam. The dam is 47 feet high from intake elevation to the top of the dam. It is approximately 276 feet wide at the base, from intake to outlet. The upstream wall of the dam was built at a 3:1 slope, the outlet side at a 2:1 slope. The dam is approximately 258 feet wide across its top, from bank to bank (NW-SE).

The original dam had a rubble masonry spillway on the north shore that led to Twin Lakes Reservoir No. 2. It was constructed so that the elevation of the water in Reservoir No. 1 had to exceed 8,547 feet before it poured over the spillway. The spillway floor sloped downward to an elevation of 8,536 feet at the northeast end. In 1966, the spillway was raised one foot to allow more water to be retained in Reservoir No. 1. At that time, the old spillway was removed and rebuilt with concrete. Therefore, this portion of the dam structure is no longer original. It is likely that a small amount of fill was added to the access road across the top of the dam. However, the riprap and remaining dam features, including the control house and outlet structure, were not altered in any way.